



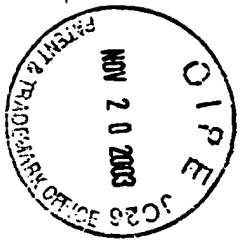
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FIG 5A

Human GDNF receptor Clones -- Alignment to generate consensus sequence

(SEQ ID NO:45)	Gdnfr	-237	AAATCTGGCCT	CGGAACACGC	CATTCTCCGC	GCCGCTTCCA	ATAACCACTA	-188
(SEQ ID NO:46)	Hsgr-21af		TCTGGCCT	CGGAACACGC	CATTCTCCGC	GCCGCTTCCA	ATAACCACTA	
(SEQ ID NO:47)	Hsgr-21bf		AAATCTGGCCT	CGGAACACGC	CATTCTCCGC	GCCGCTTCCA	ATAACCACTA	
(SEQ ID NO:48)	21acon		TCTGGCCT	CGGAACACGC	CATTCTCCGC	GCCGCTTCCA	ATAACCACTA	
(SEQ ID NO:49)	21bcon		AAATCTGGCCT	CGGAACACGC	CATTCTCCGC	GCCGCTTCCA	ATAACCACTA	
-187								
(SEQ ID NO:45)	Gdnfr	-187	ACATCCCTAA	CGAGCATCCG	AGCCGAGGGC	TCTGCTCGGA	AATCGTCCG	-138
(SEQ ID NO:46)	Hsgr-21af		ACATCCCTAA	CGAGCATCCG	AGCCGAGGGC	TCTGCTCGGA	AATCGTCCG	
(SEQ ID NO:47)	Hsgr-21bf		ACATCCCTAA	CGAGCATCCG	AGCCGAGGGC	TCTGCTCGGA	AATCGTCCG	
(SEQ ID NO:48)	21acon		ACATCCCTAA	CGAGCATCCG	AGCCGAGGGC	TCTGCTCGGA	AATCGTCCG	
(SEQ ID NO:49)	21bcon		ACATCCCTAA	CGAGCATCCG	AGCCGAGGGC	TCTGCTCGGA	AATCGTCCG	
-137								
(SEQ ID NO:45)	Gdnfr	-137	GCCCAACTCG	GCCCTTCGAG	CTCTCGAAGA	TTACCGCATC	TAATTTTTTT	-88
(SEQ ID NO:46)	Hsgr-21af		GCCCAACTCG	GCCCTTCGAG	CTCTCGAAGA	TTACCGCATC	TAATTTTTTT	
(SEQ ID NO:47)	Hsgr-21bf		GCCCAACTCG	GCCCTTCGAG	CTCTCGAAGA	TTACCGCATC	TAATTTTTTT	
(SEQ ID NO:48)	21acon		GCCCAACTCG	GCCCTTCGAG	CTCTCGAAGA	TTACCGCATC	TAATTTTTTT	
(SEQ ID NO:49)	21bcon		GCCCAACTCG	GCCCTTCGAG	CTCTCGAAGA	TTACCGCATC	TAATTTTTTT	
-87								
(SEQ ID NO:45)	Gdnfr	-87	TTCTTTTTTT	TCCTTTTCCCTA	GCGCAGATTA	AGTGAGCCCG	GAAAGGGAAG	-38
(SEQ ID NO:46)	Hsgr-21af		TTCTTTTTTT	TCCTTTTCCCTA	GCGCAGATTA	AGTGAGCCCG	GAAAGGGAAG	
(SEQ ID NO:47)	Hsgr-21bf		TTCTTTTTTT	TCCTTTTCCCTA	GCGCAGATTA	AGTGAGCCCG	GAAAGGGAAG	
(SEQ ID NO:48)	21acon		TTCTTTTTTT	TCCTTTTCCCTA	GCGCAGATTA	AGTGAGCCCG	GAAAGGGAAG	
(SEQ ID NO:49)	21bcon		TTCTTTTTTT	TCCTTTTCCCTA	GCGCAGATTA	AGTGAGCCCG	GAAAGGGAAG	
-37								
(SEQ ID NO:45)	Gdnfr	-37	GAGGGGGCGG	GGACACCAATT	GCCCTGAAAG	AATAAATAAG	TAAATAAACA	12
(SEQ ID NO:46)	Hsgr-21af		GAGGGGGCGG	GGACACCAATT	GCCCTGAAAG	AATAAATAAG	TAAATAAACA	
(SEQ ID NO:47)	Hsgr-21bf		GAGGGGGCGG	GGACACCAATT	GCCCTGAAAG	AATAAATAAG	TAAATAAACA	
(SEQ ID NO:48)	21acon		GAGGGGGCGG	GGACACCAATT	GCCCTGAAAG	AATAAATAAG	TAAATAAACA	
(SEQ ID NO:49)	21bcon		GAGGGGGCGG	GGACACCAATT	GCCCTGAAAG	AATAAATAAG	TAAATAAACA	

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FIG 5B

13  
(SEQ ID NO:45) Gdnfr AACTGGCTCC TCGCCGCAGC TGGACGCGGT CGGTTGAGTC CAGGTTGGGT 62  
(SEQ ID NO:46) Hsgr-21af AACTGGCTCC TCGCCGCAGC TGGACGCGGT CGGTTGAGTC CAGGTTGGGT  
(SEQ ID NO:47) Hsgr-21bf AACTGGCTCC TCGCCGCAGC TGGACGCGGT CGGTTGAGTC CAGGTTGGGT  
(SEQ ID NO:48) 21acon AACTGGCTCC TCGCCGCAGC TGGACGCGGT CGGTTGAGTC CAGGTTGGGT  
(SEQ ID NO:49) 21bcon AACTGGCTCC TCGCCGCAGC TGGACGCGGT CGGTTGAGTC CAGGTTGGGT

63  
(SEQ ID NO:45) Gdnfr CGGACCTGAA CCCCTAAAG CGGAACCGCC TCCCGCCCTC GCCATCCCGG 112  
(SEQ ID NO:46) Hsgr-21af CGGACCTGAA CCCCTAAAG CGGAACCGCC TCCCGCCCTC GCCATCCCGG  
(SEQ ID NO:47) Hsgr-21bf CGGACCTGAA CCCCTAAAG CGGAACCGCC TCCCGCCCTC GCCATCCCGG  
(SEQ ID NO:48) 21acon CGGACCTGAA CCCCTAAAG CGGAACCGCC TCCCGCCCTC GCCATCCCGG  
(SEQ ID NO:49) 21bcon CGGACCTGAA CCCCTAAAG CGGAACCGCC TCCCGCCCTC GCCATCCCGG

113  
(SEQ ID NO:45) Gdnfr AGCTGAGTCG CCGCGCGCGG TGGCTGCTGC CAGACCCGGA GTTTCCTCTT 162  
(SEQ ID NO:46) Hsgr-21af AGCTGAGTCG CCGCGCGCGG TGGCTGCTGC CAGACCCGGA GTTTCCTCTT  
(SEQ ID NO:47) Hsgr-21bf AGCTGAGTCG CCGCGCGCGG TGGCTGCTGC CAGACCCGGA GTTTCCTCTT  
(SEQ ID NO:48) 21acon AGCTGAGTCG CCGCGCGCGG TGGCTGCTGC CAGACCCGGA GTTTCCTCTT  
(SEQ ID NO:49) 21bcon AGCTGAGTCG CCGCGCGCGG TGGCTGCTGC CAGACCCGGA GTTTCCTCTT

163  
(SEQ ID NO:45) Gdnfr TCACCTGGATG GAGCTGAAGT TTGGGCGGGC AGAGCAGCAC AGCTGTCCGG 212  
(SEQ ID NO:46) Hsgr-21af TCACCTGGATG GAGCTGAAGT TTGGGCGGGC AGAGCAGCAC AGCTGTCCGG  
(SEQ ID NO:47) Hsgr-21bf TCACCTGGATG GAGCTGAAGT TTGGGCGGGC AGAGCAGCAC AGCTGTCCGG  
(SEQ ID NO:48) 21acon TCACCTGGATG GAGCTGAAGT TTGGGCGGGC AGAGCAGCAC AGCTGTCCGG  
(SEQ ID NO:49) 21bcon TCACCTGGATG GAGCTGAAGT TTGGGCGGGC AGAGCAGCAC AGCTGTCCGG

213  
(SEQ ID NO:45) Gdnfr GGATCGCTGC ACGCTGAGCT CCCTCGGCCA GACCCAGCGG CGGCTCGGGA 262  
(SEQ ID NO:46) Hsgr-21af GGATCGCTGC ACGCTGAGCT CCCTCGGCCA GACCCAGCGG CGGCTCGGGA  
(SEQ ID NO:47) Hsgr-21bf GGATCGCTGC ACGCTGAGCT CCCTCGGCCA GACCCAGCGG CGGCTCGGGA  
(SEQ ID NO:48) 21acon GGATCGCTGC ACGCTGAGCT CCCTCGGCCA GACCCAGCGG CGGCTCGGGA  
(SEQ ID NO:49) 21bcon GGATCGCTGC ACGCTGAGCT CCCTCGGCCA GACCCAGCGG CGGCTCGGGA

263  
(SEQ ID NO:45) Gdnfr TTTTNTTGGG GGGGGGGGGA CCAAGCCCCG GCCGGCACCA TGTTCCTGGC 312  
(SEQ ID NO:46) Hsgr-21af TTTTNTTGGG GGGGGGGGGA CCAAGCCCCG GCCGGCACCA TGTTCCTGGC  
(SEQ ID NO:47) Hsgr-21bf TTTTNTTGGG GGGGGGGGGA CCAAGCCCCG GCCGGCACCA TGTTCCTGGC  
(SEQ ID NO:48) 21acon TTTTNTTGGG GGGGGGGGGA CCAAGCCCCG GCCGGCACCA TGTTCCTGGC  
(SEQ ID NO:49) 21bcon TTTTNTTGGG GGGGGGGGGA CCAAGCCCCG GCCGGCACCA TGTTCCTGGC

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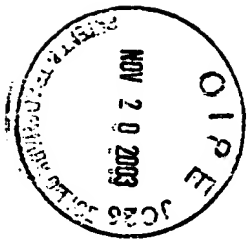


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FIG 5C

(SEQ ID NO: 45)	Gdnfr	313	GACCCCTGTAC	TTCCGCGCTGC	CGCTCTTGA	CTTGCTCCTG	TCGGCCGAAG	362
(SEQ ID NO: 48)	21acon		GNCCTGTAC	TTCCGCGCTGC	CGCTCTTGA	CTTGCTCCTG	TCGGCCGAAG	
(SEQ ID NO: 49)	21bcon		GACCCCTGTAC	TTCCGCGCTGC	CGCTCTTGA	CTTGCTCCTG	TCGGCCGAAG	
(SEQ ID NO: 45)	Gdnfr	363	TGAGCGGCGG	AGACCGCCTG	GATTGCGTGA	AAGCCAGTGA	TCAGTGCCTG	412
(SEQ ID NO: 48)	21acon		TGAGCGGCGG	AGACCGCCTG	GATTGCGTGA	AAGCCAGTGA	TCAGTGCCTG	
(SEQ ID NO: 49)	21bcon		TGAGCGGCGG	AGACCGCCTG	GATTGCGTGA	AAGCCAGTGA	TCAGTGCCTG	
(SEQ ID NO: 45)	Gdnfr	413	AAGGAGCAGA	GCTGCAGCAC	CAAGTACCGC	ACGCTAAGGC	AGTGCCTGCG	462
(SEQ ID NO: 48)	21acon		AAGGAGCAGA	GCTGCAGCAC	CAAGTACCGC	ACGCTAAGGC	AGTGCCTGCG	
(SEQ ID NO: 49)	21bcon		AAGGAGCAGA	GCTGCAGCAC	CAAGTACCGC	ACGCTAAGGC	AGTGCCTGCG	
(SEQ ID NO: 45)	Gdnfr	463	GGGCAAGGAG	ACCAACTTCA	GCCTGGCATC	CGGCTTGAG	GCCAAGGATG	512
(SEQ ID NO: 48)	21acon		GGGCAAGGAG	ACCAACTTCA	GCCTGGCATC	CGGCTTGAG	GCCAAGGATG	
(SEQ ID NO: 49)	21bcon		GGGCAAGGAG	ACCAACTTCA	GCCTGGCATC	CGGCTTGAG	GCCAAGGATG	
(SEQ ID NO: 45)	Gdnfr	513	AGTGGCCGAG	CGCCATGGAG	GCCCTGAAGC	AGAAGTCGCT	CTACAACCTGC	562
(SEQ ID NO: 48)	21acon		AGTGGCCGAG	CGCCATGGAG	GCCCTGAAGC	AGAAGTCGCT	CTACAACCTGC	
(SEQ ID NO: 49)	21bcon		AGTGGCCGAG	CGCCATGGAG	GCCCTGAAGC	AGAAGTCGCT	CTACAACCTGC	
(SEQ ID NO: 45)	Gdnfr	563	CGCTGCAGC	GGGGTATGAA	GAAAGAGAAG	AACTGCTTGC	GCATTACTG	612
(SEQ ID NO: 48)	21acon		CGCTGCAGC	GGGGTATGAA	GAAAGAGAAG	AACTGCTTGC	GCATTACTG	
(SEQ ID NO: 49)	21bcon		CGCTGCAGC	GGGGTATGAA	GAAAGAGAAG	AACTGCTTGC	GCATTACTG	
(SEQ ID NO: 45)	Gdnfr	613	GAGCATGTAC	CAGAGCCTGC	AGGGAATGA	TCTGCTGGAG	GATTCCCAT	662
(SEQ ID NO: 48)	21acon		GAGCATGTAC	CAGAGCCTGC	AGGGAATGA	TCTGCTGGAG	GATTCCCAT	
(SEQ ID NO: 49)	21bcon		GAGCATGTAC	CAGAGCCTGC	AGGGAATGA	TCTGCTGGAG	GATTCCCAT	
(SEQ ID NO: 45)	Gdnfr	663	ATGAACCAAGT	TAACAGCAGA	TTGTCAAGATA	TAATCCGGGT	GGTCCCATTC	712
(SEQ ID NO: 48)	21acon		ATGAACCAAGT	TAACAGCAGA	TTGTCAAGATA	TAATCCGGGT	GGTCCCATTC	
(SEQ ID NO: 49)	21bcon		ATGAACCAAGT	TAACAGCAGA	TTGTCAAGATA	TAATCCGGGT	GGTCCCATTC	

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FIG 5D

713  
(SEQ ID NO: 45) ATATCAGATG TTTTTCAGCA AGTGGAGCAC ATTCCCAAG GGAACAACCTG 762  
(SEQ ID NO: 48) ATATCAGATG TTTTTCAGCA AGTGGAGCAC ATTCCCAAG GGAACAACCTG  
(SEQ ID NO: 49) ATATCAGATG TTTTTCAGCA AGTGGAGCAC ATTCCCAAG GGAACAACCTG

763  
(SEQ ID NO: 45) CCTGGATGCA GCGAAGGCTT GCAACCTCGA CGACATTTCG AAGAAGTACA 812  
(SEQ ID NO: 48) CCTGGATGCA GCGAAGGCTT GCAACCTCGA CGACATTTCG AAGAAGTACA  
(SEQ ID NO: 49) CCTGGATGCA GCGAAGGCTT GCAACCTCGA CGACATTTCG AAGAAGTACA

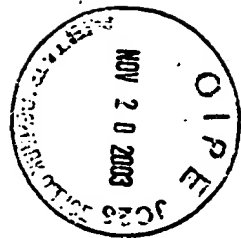
813  
(SEQ ID NO: 45) GGTGCGCGTA CATCACCCTG TGCACCACCA GCGTGTCCAA .GATGTCTGC 862  
(SEQ ID NO: 50) GTCGCGCTA CATCACCCTG TGCACCACCA GCGTGTCCAA TGATGTCTGC  
(SEQ ID NO: 48) GGTGCGCGTA CATCACCCTG TGCACCACCA GCGTGTCCAA CGATGTCTGC  
(SEQ ID NO: 49) GGTGCGCGTA CATCACCCTG TGCACCACCA GCGTGTCCAA CGATGTCTGC  
(SEQ ID NO: 51) GTCGCGCTA CATCACCCTG TGCACCACCA GCGTGTCCAA TGATGTCTGC

863  
(SEQ ID NO: 45) AACCGCCGCA AGTGCACAAA GGCCTCCCG CAGTTCTTTG ACAAGGTCCC 912  
(SEQ ID NO: 50) AACCGCCGCA AGTGCACAAA GGCCTCCCG CAGTTCTTTG ACAAGGTCCC  
(SEQ ID NO: 48) AACCGCCGCA AGTGCACAAA GGCCTCCCG CAGTTCTTTG ACAAGGTCCC  
(SEQ ID NO: 49) AACCGCCGCA AGTGCACAAA GGCCTCCCG CAGTTCTTTG ACAAGGTCCC  
(SEQ ID NO: 51) AACCGCCGCA AGTGCACAAA GGCCTCCCG CAGTTCTTTG ACAAGGTCCC

913  
(SEQ ID NO: 45) GGCCAAGCAC AGCTACGGAA TGCCTTCTTG CTCCCTGCCG GACATCGCCT 962  
(SEQ ID NO: 50) GGCCAAGCAC AGCTACGGAA TGCCTTCTTG CTCCCTGCCG GACATCGCCT  
(SEQ ID NO: 48) GGCCAAGCAC AGCTACGGAA TGCCTTCTTG CTCCCTGCCG GACATCGCCT  
(SEQ ID NO: 49) GGCCAAGCAC AGCTACGGAA TGCCTTCTTG CTCCCTGCCG GACATCGCCT  
(SEQ ID NO: 51) GGCCAAGCAC AGCTACGGAA TGCCTTCTTG CTCCCTGCCG GACATCGCCT

963  
(SEQ ID NO: 45) GCACAGAGCG GAGCGACAG ACCATCGTGC CTGTGTGCTC CTATGAAGAG 1012  
(SEQ ID NO: 50) GCACAGAGCG GAGCGACAG ACCATCGTGC CTGTGTGCTC CTATGAAGAG  
(SEQ ID NO: 48) GCACAGAGCG GAGCGACAG ACCATCGTGC CTGTGTGCTC CTATGAAGAG  
(SEQ ID NO: 49) GCACAGAGCG GAGCGACAG ACCATCGTGC CTGTGTGCTC CTATGAAGAG  
(SEQ ID NO: 51) GCACAGAGCG GAGCGACAG ACCATCGTGC CTGTGTGCTC CTATGAAGAG

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FIG 5E

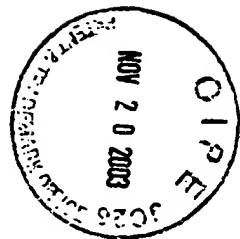
1013  
AGGGAAGAAGC CCAACTGTTT GAATTTGCAG GACTCCTGCA AGACGAATTA  
1062  
A  
AGGGAAGAAGC CCAACTGTTT GAATTTGCAG GACTCCTGCA AGACGAATTA  
AGGGAAGAAGC CCAACTGTTT GAATTTGCAG GACTCCTGCA AGACGAATTA  
AGGGAAGAAGC CCAACTGTTT GAATTTGCAG GACTCCTGCA AGACGAATTA

1063  
CATCTGCAGA TCTCGCCTTG CGGATTTTTT TACCAACTGC CAGCCAGAGT  
1112  
CATCTGCAGA TCTCGCCTTG CGGATTTTTT TACCAACTGC CAGCCAGAGT  
CATCTGCAGA TCTCGCCTTG CGGATTTTTT TACCAACTGC CAGCCAGAGT  
CATCTGCAGA TCTCGCCTTG CGGATTTTTT TACCAACTGC CAGCCAGAGT  
CATCTGCAGA TCTCGCCTTG CGGATTTTTT TACCAACTGC CAGCCAGAGT

1113  
CAAGGTCGTGT CAGCAGCTGT CTAAAGGAAA ACTACGCTGA CTGCTCTCTC  
1162  
CAAGGTCGTGT CAGCAGCTGT CTAAAGGAAA ACTACGCTGA CTGCTCTCTC  
CAAGGTCGTGT CAGCAGCTGT CTAAAGGAAA ACTACGCTGA CTGCTCTCTC  
CAAGGTCGTGT CAGCAGCTGT CTAAAGGAAA ACTACGCTGA CTGCTCTCTC  
CAAGGTCGTGT CAGCAGCTGT CTAAAGGAAA ACTACGCTGA CTGCTCTCTC  
CAAGGTCGTGT CAGCAGCTGT CTAAAGGAAA ACTACGCTGA CTGCTCTCTC

1163  
GCTTACTCGG GGGTTAATTG CACAGTCATG ACCCCCAACT ACATAGACTC  
1212  
GCTTACTCGG GGGTTAATTG CACAGTCATG ACCCCCAACT ACATAGACTC  
GCTTACTCGG GGGTTAATTG CACAGTCATG ACCCCCAACT ACATAGACTC  
GCTTACTCGG GGGTTAATTG CACAGTCATG ACCCCCAACT ACATAGACTC  
GCTTACTCGG GGGTTAATTG CACAGTCATG ACCCCCAACT ACATAGACTC  
GCTTACTCGG GGGTTAATTG CACAGTCATG ACCCCCAACT ACATAGACTC

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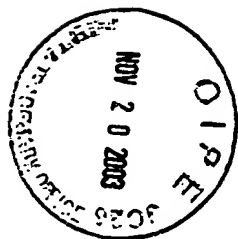
FIG 5F

(SEQ ID NO:45)	Gdnfr	1213	1262
(SEQ ID NO:54)	Hsgr-2	CAGTAGCCTC	AGTGTGGCCC
(SEQ ID NO:52)	Hsgr-21ar	CAGTAGCCTC	AGTGTGGCCC
(SEQ ID NO:53)	Hsgr-21br	CAGTAGCCTC	AGTGTGGCCC
(SEQ ID NO:50)	Hsgr-29a	CAGTAGCCTC	AGTGTGGCCC
(SEQ ID NO:48)	21acon	CAGTAGCCTC	AGTGTGGCCC
(SEQ ID NO:49)	21bcon	CAGTAGCCTC	AGTGTGGCCC
(SEQ ID NO:51)	29brc	CAGTAGCCTC	AGTGTGGCCC
(SEQ ID NO:45)	Gdnfr	1263	1312
(SEQ ID NO:54)	Hsgr-2	ACCTAGAGA	GTCCTTGAAA
(SEQ ID NO:55)	Hsgr-9	ACCTAGAGA	GTCCTTGAAA
(SEQ ID NO:52)	Hsgr-21ar	ACCTAGAGA	GTCCTTGAAA
(SEQ ID NO:53)	Hsgr-21br	ACCTAGAGA	GTCCTTGAAA
(SEQ ID NO:50)	Hsgr-29a	ACCTAGAGA	GTCCTTGAAA
(SEQ ID NO:48)	21acon	ACCTAGAGA	GTCCTTGAAA
(SEQ ID NO:49)	21bcon	ACCTAGAGA	GTCCTTGAAA
(SEQ ID NO:51)	29brc	ACCTAGAGA	GTCCTTGAAA
(SEQ ID NO:45)	Gdnfr	1313	1362
(SEQ ID NO:54)	Hsgr-2	CTTAAAAATG	CAATTCAGC
(SEQ ID NO:55)	Hsgr-9	CTTAAAAATG	CAATTCAGC
(SEQ ID NO:52)	Hsgr-21ar	CTTAAAAATG	CAATTCAGC
(SEQ ID NO:53)	Hsgr-21br	CTTAAAAATG	CAATTCAGC
(SEQ ID NO:50)	Hsgr-29a	CTTAAAAATG	CAATTCAGC
(SEQ ID NO:48)	21acon	CTTAAAAATG	CAATTCAGC
(SEQ ID NO:49)	21bcon	CTTAAAAATG	CAATTCAGC
(SEQ ID NO:51)	29brc	CTTAAAAATG	CAATTCAGC
(SEQ ID NO:45)	Gdnfr	1363	1412
(SEQ ID NO:54)	Hsgr-2	GCAGCCAGCC	TTCCCACTAC
(SEQ ID NO:55)	Hsgr-9	GCAGCCAGCC	TTCCCACTAC
(SEQ ID NO:52)	Hsgr-21ar	GCAGCCAGCC	TTCCCACTAC
(SEQ ID NO:53)	Hsgr-21br	GCAGCCAGCC	TTCCCACTAC
(SEQ ID NO:50)	Hsgr-29a	GCAGCCAGCC	TTCCCACTAC
(SEQ ID NO:48)	21acon	GCAGCCAGCC	TTCCCACTAC
(SEQ ID NO:49)	21bcon	GCAGCCAGCC	TTCCCACTAC
(SEQ ID NO:51)	29brc	GCAGCCAGCC	TTCCCACTAC

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FIG 5G

1413 (SEQ ID NO: 45) Gdnfr TCCTGGGTTAA GAACAAGCCC CTGGGGCCAG CAGGCTCTGA GAATGAATTT 1462  
(SEQ ID NO: 54) Hsgr-2 TCCTGGGTTAA GAACAAGCCC CTGGGGCCAG CAGGCTCTGA GAATGAATTT  
(SEQ ID NO: 55) Hsgr-9 TCCTGGGTTAA GAACAAGCCC CTGGGGCCAG CAGGCTCTGA GAATGAATTT  
(SEQ ID NO: 52) Hsgr-21ar TCCTGGGTTAA GAACAAGCCC CTGGGGCCAG CAGGCTCTGA GAATGAATTT  
(SEQ ID NO: 53) Hsgr-21br TCCTGGGTTAA GAACAAGCCC CTGGGGCCAG CAGGCTCTGA GAATGAATTT  
(SEQ ID NO: 50) Hsgr-29a TCCTGGGTTAA GAACAAGCCC CTGGGGCCAG CAGGCTCTGA GAATGAATTT  
(SEQ ID NO: 48) 21acon TCCTGGGTTAA GAACAAGCCC CTGGGGCCAG CAGGCTCTGA GAATGAATTT  
(SEQ ID NO: 49) 21bcon TCCTGGGTTAA GAACAAGCCC CTGGGGCCAG CAGGCTCTGA GAATGAATTT  
(SEQ ID NO: 51) 29brc TCCTGGGTTAA GAACAAGCCC CTGGGGCCAG CAGGCTCTGA GAATGAATTT

1463 (SEQ ID NO: 45) Gdnfr CCCACTCATTG TTTTGGCCACC GTGTGCAAT TTACAGGCAC AGAAGCTGAA 1512  
(SEQ ID NO: 54) Hsgr-2 CCCACTCATTG TTTTGGCCACC GTGTGCAAT TTACAGGCAC AGAAGCTGAA  
(SEQ ID NO: 55) Hsgr-9 CCCACTCATTG TTTTGGCCACC GTGTGCAAT TTACAGGCAC AGAAGCTGAA  
(SEQ ID NO: 52) Hsgr-21ar CCCACTCATTG TTTTGGCCACC GTGTGCAAT TTACAGGCAC AGAAGCTGAA  
(SEQ ID NO: 53) Hsgr-21br CCCACTCATTG TTTTGGCCACC GTGTGCAAT TTACAGGCAC AGAAGCTGAA  
(SEQ ID NO: 50) Hsgr-29a CCCACTCATTG TTTTGGCCACC GTGTGCAAT TTACAGGCAC AGAAGCTGAA  
(SEQ ID NO: 48) 21acon CCCACTCATTG TTTTGGCCACC GTGTGCAAT TTACAGGCAC AGAAGCTGAA  
(SEQ ID NO: 49) 21bcon CCCACTCATTG TTTTGGCCACC GTGTGCAAT TTACAGGCAC AGAAGCTGAA  
(SEQ ID NO: 51) 29brc CCCACTCATTG TTTTGGCCACC GTGTGCAAT TTACAGGCAC AGAAGCTGAA

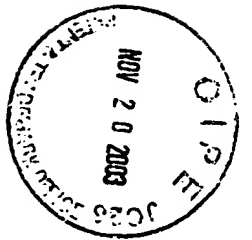
1513 (SEQ ID NO: 45) Gdnfr ATCCAAATGTG TCGGGGCAATA CACACCTCTG TATTTCCAAT GGTAAATTATG 1562  
(SEQ ID NO: 54) Hsgr-2 ATCCAAATGTG TCGGGGCAATA CACACCTCTG TATTTCCAAT GGTAAATTATG  
(SEQ ID NO: 55) Hsgr-9 ATCCAAATGTG TCGGGGCAATA CACACCTCTG TATTTCCAAT GGTAAATTATG  
(SEQ ID NO: 52) Hsgr-21ar ATCCAAATGTG TCGGGGCAATA CACACCTCTG TATTTCCAAT GGTAAATTATG  
(SEQ ID NO: 53) Hsgr-21br ATCCAAATGTG TCGGGGCAATA CACACCTCTG TATTTCCAAT GGTAAATTATG  
(SEQ ID NO: 48) 21acon ATCCAAATGTG TCGGGGCAATA CACACCTCTG TATTTCCAAT GGTAAATTATG  
(SEQ ID NO: 49) 21bcon ATCCAAATGTG TCGGGGCAATA CACACCTCTG TATTTCCAAT GGTAAATTATG  
(SEQ ID NO: 51) 29brc ATCCAAATGTG TCGGGGCAATA CACACCTCTG TATTTCCAAT GGTAAATTATG

1563 (SEQ ID NO: 45) Gdnfr AAAAAAGAAGG TCCTCGGTGCT TTCAGCCACA TAACCACAAA ATCAATGGCT 1612  
(SEQ ID NO: 54) Hsgr-2 AAAAAAGAAGG TCCTCGGTGCT TTCAGCCACA TAACCACAAA ATCAATGGCT  
(SEQ ID NO: 55) Hsgr-9 AAAAAAGAAGG TCCTCGGTGCT TTCAGCCACA TAACCACAAA ATCAATGGCT  
(SEQ ID NO: 52) Hsgr-21ar AAAAAAGAAGG TCCTCGGTGCT TTCAGCCACA TAACCACAAA ATCAATGGCT  
(SEQ ID NO: 53) Hsgr-21br AAAAAAGAAGG TCCTCGGTGCT TTCAGCCACA TAACCACAAA ATCAATGGCT  
(SEQ ID NO: 48) 21acon AAAAAAGAAGG TCCTCGGTGCT TTCAGCCACA TAACCACAAA ATCAATGGCT  
(SEQ ID NO: 49) 21bcon AAAAAAGAAGG TCCTCGGTGCT TTCAGCCACA TAACCACAAA ATCAATGGCT  
(SEQ ID NO: 51) 29brc AAAAAAGAAGG TCCTCGGTGCT TTCAGCCACA TAACCACAAA ATCAATGGCT

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FIG 5H

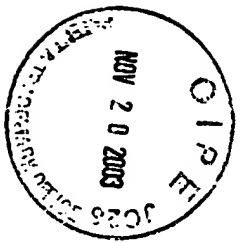
(SEQ ID NO: 45)	Gdnfr	1613	GCTCCCTCCAA	GCTGTGTCT	GAGCCCACTG	CTGTCTCTGG	TGGTAACCGC	1662
(SEQ ID NO: 54)	Hsgr-2		GCTCCCTCCAA	GCTGTGTCT	GAGCCCACTG	CTGTCTCTGG	TGGTAACCGC	
(SEQ ID NO: 55)	Hsgr-9		GCTCCCTCCAA	GCTGTGTCT	GAGCCCACTG	CTGTCTCTGG	TGGTAACCGC	
(SEQ ID NO: 52)	Hsgr-21ar		GCTCCCTCCAA	GCTGTGTCT	GAGCCCACTG	CTGTCTCTGG	TGGTAACCGC	
(SEQ ID NO: 53)	Hsgr-21br		GCTCCCTCCAA	GCTGTGTCT	GAGCCCACTG	CTGTCTCTGG	TGGTAACCGC	
(SEQ ID NO: 48)	21acon		GCTCCCTCCAA	GCTGTGTCT	GAGCCCACTG	CTGTCTCTGG	TGGTAACCGC	
(SEQ ID NO: 49)	21bcon		GCTCCCTCCAA	GCTGTGTCT	GAGCCCACTG	CTGTCTCTGG	TGGTAACCGC	
(SEQ ID NO: 51)	29brc		GCTCCCTCCAA	GCTGTGTCT	GAGCCCACTG	CTGTCTCTGG	TGGTAACCGC	
(SEQ ID NO: 45)	Gdnfr	1663	TCTGTCCACC	CTATTATCTT	TAACAGAAAC	ATCATAGCTG	CATTAAAAAA	1712
(SEQ ID NO: 54)	Hsgr-2		TCTGTCCACC	CTATTATCTT	TAACAGAAAC	ATCATAGCTG	CATTAAAAAA	
(SEQ ID NO: 55)	Hsgr-9		TCTGTCCACC	CTATTATCTT	TAACAGAAAC	ATCATAGCTG	CATTAAAAAA	
(SEQ ID NO: 52)	Hsgr-21ar		TCTGTCCACC	CTATTATCTT	TAACAGAAAC	ATCATAGCTG	CATTAAAAAA	
(SEQ ID NO: 53)	Hsgr-21br		TCTGTCCACC	CTATTATCTT	TAACAGAAAC	ATCATAGCTG	CATTAAAAAA	
(SEQ ID NO: 48)	21acon		TCTGTCCACC	CTATTATCTT	TAACAGAAAC	ATCATAGCTG	CATTAAAAAA	
(SEQ ID NO: 49)	21bcon		TCTGTCCACC	CTATTATCTT	TAACAGAAAC	ATCATAGCTG	CATTAAAAAA	
(SEQ ID NO: 51)	29brc		TCTGTCCACC	CTATTATCTT	TAACAGAAAC	ATCATAGCTG	CATTAAAAAA	
(SEQ ID NO: 45)	Gdnfr	1713	ATACAATATG	GACATGTAAA	AAGACAAAAA	CCAAGTTATC	TGTTTCCCTG	1762
(SEQ ID NO: 54)	Hsgr-2		ATACAATATG	GACATGTAAA	AAGACAAAAA	CCAAGTTATC	TGTTTCCCTG	
(SEQ ID NO: 55)	Hsgr-9		ATACAATATG	GACATGTAAA	AAGACAAAAA	CCAAGTTATC	TGTTTCCCTG	
(SEQ ID NO: 51)	29brc		ATACAATATG	GACATGTAAA	AAGACAAAAA	CCAAGTTATC	TGTTTCCCTG	
(SEQ ID NO: 45)	Gdnfr	1763	TCTCTTGTAT	AGCTGAATTT	CCAGTTTAGG	AGCTCAGTTG	AGAACAAGTT	1812
(SEQ ID NO: 54)	Hsgr-2		TCTCTTGTAT	AGCTGAATTT	CCAGTTTAGG	AGCTCAGTTG	AGAACAAGTT	
(SEQ ID NO: 55)	Hsgr-9		TCTCTTGTAT	AGCTGAATTT	CCAGTTTAGG	AGCTCAGTTG	AGAACAAGTT	
(SEQ ID NO: 51)	29brc		TCTCTTGTAT	AGCTGAATTT	CCAGTTTAGG	AGCTCAGTTG	AGAACAAGTT	
(SEQ ID NO: 45)	Gdnfr	1813	CCATTCAACT	GGAACATTTT	TTTTTTTT. CC	TTTTTAAGAA	GCTTCTGTG	1862
(SEQ ID NO: 54)	Hsgr-2		CCATTCAACT	GGAACATTTT	TTTTTTTT. CC	TTTTTAAGAA	GCTTCTGTG	
(SEQ ID NO: 55)	Hsgr-9		CCATTCAACT	GGAACATTTT	TTTTTTTT. CC	TTTTTAAGAA	GCTTCTGTG	
(SEQ ID NO: 51)	29brc		CCATTCAACT	GGAACATTTT	TTTTTTTT. CC	TTTTTAAGAA	GCTTCTGTG	
(SEQ ID NO: 45)	Gdnfr	1863	ATCCTTCGGG	GCTTCTGTGA	AAAACCTGAT	GCAGTGCTCC	ATCCAACATC	1912
(SEQ ID NO: 54)	Hsgr-2		ATCCTTCGGG	GCTTCTGTGA	AAAACCTGAT	GCAGTGCTCC	ATCCAACATC	
(SEQ ID NO: 55)	Hsgr-9		ATCCTTCGGG	GCTTCTGTGA	AAAACCTGAT	GCAGTGCTCC	ATCCAACATC	
(SEQ ID NO: 51)	29brc		ATCCTTCGGG	GCTTCTGTGA	AAAACCTGAT	GCAGTGCTCC	ATCCAACATC	

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FIG 51

(SEQ ID NO: 45)	Gdnfr	1913	AGAAGGCTTTT	GGGATATGCT	GTATTTTAAA	GGGACAGTTT	GTAACTTGGG	1962
(SEQ ID NO: 54)	Hsgr-2		AGAAGGCTTTT	GGGATATGCT	GTATTTTAAA	GGGACAGTTT	GTAACTTGGG	
(SEQ ID NO: 55)	Hsgr-9		AGAAGGCTTTT	GGGATATGCT	GTATTTTAAA	GGGACAGTTT	GTAACTTGGG	
(SEQ ID NO: 51)	29brc		AGAAGGCTTTT	GGGATATGCT	GTATTTTAAA	GGGACAGTTT	GTAACTTGGG	
(SEQ ID NO: 45)	Gdnfr	1963	CTGTAAAGCA	AACTGGGGCT	GTGTTTTGCA	TGATGATGAT	CATCATGATC	2012
(SEQ ID NO: 54)	Hsgr-2		CTGTAAAGCA	AACTGGGGCT	GTGTTTTGCA	TGATGATGAT	CATCATGATC	
(SEQ ID NO: 55)	Hsgr-9		CTGTAAAGCA	AACTGGGGCT	GTGTTTTGCA	TGATGATGAT	CATCATGATC	
(SEQ ID NO: 51)	29brc		CTGTAAAGCA	AACTGGGGCT	GTGTTTTGCA	TGATGATGAT	CATCATGATC	
(SEQ ID NO: 45)	Gdnfr	2013	ATGAT	.....	.....	.....	.....GATTTT	2062
(SEQ ID NO: 54)	Hsgr-2		ATGAT	.....	.....	.....	.....GATTTT	
(SEQ ID NO: 55)	Hsgr-9		ATGAT	.....	.....	.....	.....GATTTT	
(SEQ ID NO: 51)	29brc		ATGAT	.....	.....	.....	.....GATTTT	
(SEQ ID NO: 45)	Gdnfr	2063	AACAGTTTTA	CTTCTGGGCT	TTCCCTAGCTA	GAGAAGAGT	TAATATTTCT	2112
(SEQ ID NO: 54)	Hsgr-2		AACAGTTTTA	CTTCTGGGCT	TTCCCTAGCTA	GAGAAGAGT	TAATATTTCT	
(SEQ ID NO: 55)	Hsgr-9		AACAGTTTTA	CTTCTGGGCT	TTCCCTAGCTA	GAGAAGAGT	TAATATTTCT	
(SEQ ID NO: 51)	29brc		AACAGTTTTA	CTTCTGGGCT	TTCCCTAGCTA	GAGAAGAGT	TAATATTTCT	
(SEQ ID NO: 45)	Gdnfr	2113	AAGTAACTC	CCATATCTCC	TTTAAATGACA	TTGATTTTCTA	ATGATATATAA	2162
(SEQ ID NO: 54)	Hsgr-2		AAGTAACTC	CCATATCTCC	TTTAAATGACA	TTGATTTTCTA	ATGATATATAA	
(SEQ ID NO: 55)	Hsgr-9		AAGTAACTC	CCATATCTCC	TTTAAATGACA	TTGATTTTCTA	ATGATATATAA	
(SEQ ID NO: 51)	29brc		AAGTAACTC	CCATATCTCC	TTTAAATGACA	TTGATTTTCTA	ATGATATATAA	
(SEQ ID NO: 45)	Gdnfr	2163	TTTCAGCCTA	CATTGATGCC	AAAGCTTTTTT	GCCACAAGA	AGATTCTTAC	2212
(SEQ ID NO: 54)	Hsgr-2		TTTCAGCCTA	CATTGATGCC	AAAGCTTTTTT	GCCACAAGA	AGATTCTTAC	
(SEQ ID NO: 55)	Hsgr-9		TTTCAGCCTA	CATTGATGCC	AAAGCTTTTTT	GCCACAAGA	AGATTCTTAC	
(SEQ ID NO: 51)	29brc		TTTCAGCCTA	CATTGATGCC	AAAGCTTTTTT	GCCACAAGA	AGATTCTTAC	
(SEQ ID NO: 45)	Gdnfr	2213	CAAGAGTGGG	CTTTGTGGA	ACAGCTGGTA	CTGATGTTCA	CCTTTATATA	2262
(SEQ ID NO: 54)	Hsgr-2		CAAGAGTGGG	CTTTGTGGA	ACAGCTGGTA	CTGATGTTCA	CCTTTATATA	
(SEQ ID NO: 55)	Hsgr-9		CAAGAGTGGG	CTTTGTGGA	ACAGCTGGTA	CTGATGTTCA	CCTTTATATA	
(SEQ ID NO: 51)	29brc		CAAGAGTGGG	CTTTGTGGA	ACAGCTGGTA	CTGATGTTCA	CCTTTATATA	

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FIG 5J

(SEQ ID NO: 45)	Gdnfr	2263	TGTAAGTACGA	TTTTCCACGC	TGATGTTTAT	GTACTGTAA	CAGTTCGTGA	2312
(SEQ ID NO: 54)	Hsgr-2		TGTAAGTACGA	TTTTCCACGC	TGATGTTTAT	GTACTGTAA	CAGTTCGTGA	
(SEQ ID NO: 55)	Hsgr-9		TGTAAGTACGA	TTTTCCACGC	TGATGTTTAT	GTACTGTAA	CAGTTCGTGA	
(SEQ ID NO: 51)	29brc		TGTAAGTACGA	TTTTCCACGC	TGATGTTTAT	GTACTGTAA	CAGTTCGTGA	
(SEQ ID NO: 45)	Gdnfr	2313	CTCTGTGACA	AAAGAAAAAA	CACCTGTCAC	ATCCAATAT	AGTATCTGTC	2362
(SEQ ID NO: 54)	Hsgr-2		CTCTGTGACA	AAAGAAAA				
(SEQ ID NO: 55)	Hsgr-9		CTCTGTGACA	AAAGAAAA				
(SEQ ID NO: 51)	29brc		CTCTGTGACA	AAAGAAAAAA	CACCTGTCAC	ATCCAATAT	AGTATCTGTC	
(SEQ ID NO: 45)	Gdnfr	2363	TTTTTCGTCAA	AATAGAGAGT	GGGAATGAG	TGTGCCGATT	CAATACCTCA	2412
(SEQ ID NO: 51)	29brc		TTTTTCGTCAA	AATAGAGAGT	GGGAATGAG	TGTGCCGATT	CAATACCTCA	
(SEQ ID NO: 45)	Gdnfr	2413	ATCCCTGAAC	GACACTCTCC	TAATCCTAAG	CCTTACCCTGA	GTGAGAAGCC	2462
(SEQ ID NO: 51)	29brc		ATCCCTGAAC	GACACTCTCC	TAATCCTAAG	CCTTACCCTGA	GTGAGAAGCC	
(SEQ ID NO: 45)	Gdnfr	2463	CTTTTACCTAA	CAAAAAGTCCA	ATATAGCTGA	AATGTCGCTC	TAATTAATCTTT	2512
(SEQ ID NO: 51)	29brc		CTTTTACCTAA	CAAAAAGTCCA	ATATAGCTGA	AATGTCGCTC	TAATTAATCTTT	
(SEQ ID NO: 45)	Gdnfr	2513	TACACATATG	AGGTTATATG	TAGAAAAAAA	TTTTTACTACT	AAATGATTTTC	2562
(SEQ ID NO: 51)	29brc		TACACATATG	AGGTTATATG	TAGAAAAAAA	TTTTTACTACT	AAATGATTTTC	
(SEQ ID NO: 45)	Gdnfr	2563	AACTATTGGC	TTTCTATATT	TTGAAAAGTAA	TGATATTGTC	TCATTTTTTTT	2612
(SEQ ID NO: 51)	29brc		AACTATTGGC	TTTCTATATT	TTGAAAAGTAA	TGATATTGTC	TCATTTTTTTT	
(SEQ ID NO: 45)	Gdnfr	2613	ACTGATGGTT	TAATACAAAA	TACACAGAGC	TTGTTTCCCC	TCATTAAGTAG	2662
(SEQ ID NO: 51)	29brc		ACTGATGGTT	TAATACAAAA	TACACAGAGC	TTGTTTCCCC	TCATTAAGTAG	
(SEQ ID NO: 45)	Gdnfr	2663	TGTTTCGCTCT	GATATGAAC	TCACAAATAC	AGCTCATCAA	AAGCAGACTC	2712
(SEQ ID NO: 51)	29brc		TGTTTCGCTCT	GATATGAAC	TCACAAATAC	AGCTCATCAA	AAGCAGACTC	
(SEQ ID NO: 45)	Gdnfr	2713	TGAGAAGCCT	CGTGCTGTAG	CAGAAAGTTC	TGCATCATGT	GACTGTGAG	2762
(SEQ ID NO: 51)	29brc		TGAGAAGCCT	CGTGCTGTAG	CAGAAAGTTC	TGCATCATGT	GACTGTGAG	

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FIG 5K

(SEQ ID NO: 45)	Gdnfr	2763	AGGCAGGAGG	AAACAGAAC	GACAAGCATT	GTCTTTTGTG	ATTGCTCGAA	2812
(SEQ ID NO: 51)	29brc		AGGCAGGAGG	AAACAGAAC	GACAAGCATT	GTCTTTTGTG	ATTGCTCGAA	
(SEQ ID NO: 45)	Gdnfr	2813	GTGCAAGCGT	GCAATACCTGT	GGAGGGAAGT	GGTGGCTGCT	TGTAATGTT	2862
(SEQ ID NO: 51)	29brc		GTGCAAGCGT	GCAATACCTGT	GGAGGGAAGT	GGTGGCTGCT	TGTAATGTT	
(SEQ ID NO: 45)	Gdnfr	2863	CTGCAGCATC	TCTTGACACA	CTTGTGATGA	CACAATCCAG	TACCTTGTT	2912
(SEQ ID NO: 51)	29brc		CTGCAGCATC	TCTTGACACA	CTTGTGATGA	CACAATCCAG	TACCTTGTT	
(SEQ ID NO: 45)	Gdnfr	2913	TTCAGGTTAT	CTGACAAAGG	CAGCTTTGAT	TGGGACATGG	AGGCATGGGC	2962
(SEQ ID NO: 51)	29brc		TTCAGGTTAT	CTGACAAAGG	CAGCTTTGAT	TGGGACATGG	AGGCATGGGC	
(SEQ ID NO: 45)	Gdnfr	2963	AGGCCGGAA					
(SEQ ID NO: 51)	29brc		AGGCCGGAA					

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